Questioned Documents Unit (QDU) Procedures for Conducting a Watermark Search

1 Scope

These procedures will be used by a forensic document examiner or document analyst in order to determine the source of identifying marks (i.e., watermarks and brands) placed into or on the paper by the manufacturer, to identify the manufacturer of the paper, and/or to determine when a particular paper became commercially available (for dating purposes).

2 Equipment/Materials/Reagents

- Post's Paper Mill Directories
- Lockwood's Directories
- Lockwood-Post's Directories
- Information provided by paper manufacturers
- Walden's Paper Catalogues
- Walden's ABC Guide & Paper Production Yearbooks
- Phillips International Paper Directories
- Paper manufacturers' websites
- Other related paper source materials obtained by the Laboratory when needed

3 Standards and Controls

Not Applicable	٠.
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4 Sampling

Not Applicable.

5 Procedures

5.1 The presence of a watermark(s), as determined in the *QDU Procedures for Initial Assessment of Documentary Evidence*, may necessitate a watermark search if it is a requested examination or if it is determined to be a probative examination. A watermark search may yield information regarding the manufacturer, as well as information regarding commercial introduction of a particular paper (i.e., dating).

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- 5.1.1 Information regarding the manufacturer of an item may be present

 While this is not a traditional watermark, probative information similar to watermarks may be gained by following similar search methods using the internet.
- 5.2 The case examiner may conduct the watermark search, or request that the assigned analyst/technician conduct the search, by recording the request in Forensic Advantage. For Legacy casework, written instructions will be given to the analyst/technician.

5.3 Redacted

the watermark is the information that is to be searched. This information can be searched using a variety of reference materials and resources. These resources include QDU watermark references, the internet,

Redacted

The search may be performed in one of the following ways:

5.4 QDU Watermark References

- **5.4.1** Manufacturer's information regarding watermarks and brands can be found in the following publications in the QDU's watermark references: Walden's Paper Catalog, Walden's ABC Guide & Paper Production Yearbook, Lockwood's Directory, Lockwood-Post's Directory, and Phillips International Paper Directory.
- **5.4.1.1** The Lockwood-Post's Directories after 2003 do not contain information regarding watermarks and brands.
- Redacte of the watermark(s) and/or image name(s) can be searched in the appropriate section

 Redacted of the paper manufacturer directories. If Redacte of the watermark(s) is located, information regarding the manufacturer of that watermarked paper may be listed, such as paper mill, paper converter, and/or paper merchant. The appropriate section of these directories can be searched for contact information for the paper manufacturer. Generally, the paper mill is the preferred contact for information regarding the source or dating of the paper. The referenced pages of the directory should be copied and retained in the case records.

5.5 Internet Search

S.5.1 Redacte of the watermark(s) and/or image name(s) can be searched using GoogleTM or an equivalent internet search engine Redacted

Locate links to paper manufacturers' web sites. Information on the watermarked paper may be located directly on the website or the appropriate contact information Redacted may be listed so further information can be obtained directly from the manufacturer's offices. Information located on the website that is probative to the case will be recorded (images files, printouts or written notes) and retained in the case records.

5.6 Redacted

5.7 If further information regarding the watermarked paper is needed the paper

manufacturer may be contacted or the contact information may be provided to the appropriate law enforcement official for investigative assistance. Contact with the paper manufacturer must be recorded on an *Activity and Communication Log* (7-245), or FA Case Communication Log, as appropriate. Information provided by the paper manufacturer that is probative to the case will be recorded and retained in the case records.

5.8 The case records will include, at a minimum, any image files, printouts, referenced pages from paper directories, and photographs or drawings of watermarks that were used to support the conclusions.

5.9 Conclusions

Once examinations have been completed, reports may include one or more of the following types of conclusion(s), opinion(s), and other findings:

- The text of any watermark(s) present.
- The manufacturer's information for any watermark(s) present.
- The date the watermark(s) became commercially available.
- Other information pertaining to the watermark(s).
- **No Conclusion/No Determination** No determination could be reached as to information concerning the watermark, Redacted

This conclusion requires an explanation of the limiting factor(s).

6 Calculations

Not Applicable.

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7 Measurement Uncertainty

Not Applicable.

8 Limitations

The search capabilities are limited to items and/or information contained in the QDU watermark references, the Redacted an internet search, limited information contained in the submitted item,

9 Safety

Standard precautions should be followed for the handling evidence suspected of being contaminated with chemical and biological materials. Examiners/analysts may refer to the *FBI Laboratory Safety Manual* for additional guidance. Chemical and biological materials that are hazardous or potentially hazardous will be maintained and examined in specifically designated areas within the QDU space.

10 References

FBI Laboratory Safety Manual

Seaman Kelly, J., and Lindblom, B., *Scientific Examination of Questioned Documents Second Edition*, CRC Press, Boca Raton, FL, 2006.

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Rev. #	Issue Date	History
7	03/01/18	5.2 deleted, "by completing a QDU – 1 Case Processing Request
		Sheet (Appendix A) or QDU – 1 (LIMS) Case Processing Center
		Request Sheet (Appendix B) and selecting "Watermark" for the
		exam indicating which items contain the watermark, and selecting
		"Watermark File Search" for the method."
8	09/26/19	Section 5.2 deleted "QDU's Case Processing Center (CPC)" "CPC"
		and added "assigned analyst/technician" and "analyst/technician."
		Section 5.5.1 deleted "documented" added "recorded" and "image
		files." Section 5.7 deleted both "documented" entries and added two
		"recorded" entries. Section 5.8 added "image files."
9	07/01/20	Section 5.9 added "Once examinations have been completed, reports
		may include one or more of the following types of conclusion(s),
		opinion(s), and other findings:"

Redacted - Signatures on File

Approval

Questioned Documents
Unit Chief

Date: 07/01/2020

Questioned Documents
Technical Leader

Date: 07/01/2020